ABSTRACT

~~SATELLITE-BASED POSITIONING RECEIVER WITH CORRECTION OF CROSS-CORRELATION ERRORS~~

The invention relates to a satellite-based positioning receiver receiving signals from different satellites, comprising a correlation channel Cii per satellite received, each correlator channel Cii ~~having~~ comprising:[[-]]a correlation path [[(12)]], in-phase and quadrature, between the signal received [[(Sr)]] and two respective local quadrature carriers (sine, cosine) generated by an oscillator with digital control of carrier ~~(OPi) (NCO p)~~; [[-]] a code correlation path [[(16)]] based on the signals I, Q output by the carrier correlation path, with the local codes provided ~~(C_{Pi},A_i)~~ by a digital generator of local codes [[(OCi)]]; [[-]] an integrator [[(20)]] for providing, for each local code, signals I_c Q_c at the output of the correlator channel Cii of the satellite received, c designating each of the local codes, [[T]]the receiver according to the invention comprises, for each correlator channel of the signal received from a satellite, as many additional correlator channels as additional satellites received, and the local punctual code of the satellite received is correlated with the local codes of the other additional satellites.

~~Applications: EGNOS (RIMS), WAAS, GALILEO Ground Stations~~

~~Figure: 2~~